

# **Airworthiness Directive**

AD No.: 2021-0060

Issued: 03 March 2021

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

# Design Approval Holder's Name: Type/Model designation(s):

GE AVIATION CZECH M601 engines

Effective Date: 17 March 2021

TCDS Number(s): EASA.E.070

Foreign AD: Not applicable

Supersedure: None

ATA 05 – Time Limits / Maintenance Checks – Airworthiness Limitations Section / 04-10 Limitations and 04-20 Inspections – Amendment

# Manufacturer(s):

GE Aviation Czech (GEAC) s.r.o., formerly Walter Engines a.s.

#### **Applicability:**

M601D-1, M601D-2, M601D-11, M601D-11NZ and M601Z engines, all serial numbers.

These engines are known to be installed on, but not limited to, Air Tractor AT-300, AT-400 and AT-500 series; Allied Ag Cat Productions Inc. (formerly Grumman) G-164 series; Pacific Aerospace FU-24; PZL "Warszawa-Okęcie" PZL-106 (Kruk) series; RUAG Aerospace Services (formerly Dornier) Do 28 series; Thrush Aircraft (formerly Quality, Ayres, Rockwell) S-2R series; Viking Air Ltd. (formerly de Havilland Canada) DHC-3 Otter aeroplanes; and Zlin Aircraft a.s. Z 37 T and Z 137 T.

## **Definitions:**

For the purpose of this AD, the following definitions apply:

**The ALS**: The Airworthiness Limitations Section of the GEAC Engine Maintenance Manual (EMM) Part No. 0982309 Revision 18.

**The AMP**: The approved Aircraft Maintenance Programme (AMP) on the basis of which the operator or the owner ensures the continuing airworthiness of each operated engine. For engines



installed on aeroplanes operated under EU regulation, compliance with the approved AMP is required by Commission Regulation (EU) <u>1321/2014</u>, Part M.A.301, paragraph 3.

**New and/or more restrictive tasks and limitations**: This includes all tasks and limitations that are new and all tasks for which a threshold or interval was reduced, which were introduced into the ALS (as defined in this AD) since the previous ALS Revision that is currently incorporated in the AMP.

#### Reason:

The airworthiness limitations for certain M601 engine models, which are approved by EASA, are currently defined and published in the ALS. These instructions have been identified as mandatory for continued airworthiness.

Failure to accomplish these instructions could result in an unsafe condition.

Recently, GEAC published the ALS, as defined in this AD, introducing a visual inspection of the Centrifugal Compressor Case.

For the reason described above, this AD requires accomplishment of the actions specified in the ALS.

# **Required Action(s) and Compliance Time(s):**

Required as indicated, unless accomplished previously:

# **Maintenance Tasks and Replacement of Life Limited Parts:**

- (1) From the effective date of this AD, accomplish the following actions, as specified in the ALS, depending on engine configuration:
  - (1.1) Replace each component before exceeding the applicable life limit, and
  - (1.2) Within the thresholds and intervals (see Note 1 of this AD), accomplish all applicable maintenance tasks.

Note 1: For the purpose of this AD, the thresholds and intervals include specific tolerances for certain tasks, as defined in the ALS.

### Corrective Action(s):

(2) In case of finding discrepancies during accomplishment of any task as required by paragraph (1) of this AD, before next flight, accomplish the applicable corrective action(s) in accordance with the applicable GEAC maintenance documentation. If a detected discrepancy cannot be corrected by using existing GEAC instructions, before next flight, contact GEAC for approved instructions and accomplish those instructions accordingly.

#### **AMP Revision:**

(3) Within 12 months after the effective date of this AD, revise the approved AMP by incorporating the limitations, tasks and associated thresholds and intervals described in the ALS, as applicable, depending on engine configuration.



#### Credit:

(4) If, before the effective date of this AD, the AMP has been revised to incorporate the maintenance tasks and life limitations as specified in a previous ALS revision, that action ensures the continued accomplishment of those tasks and limitations.

Consequently, for an engine to which that AMP applies, it is acceptable to accomplish the new and/or more restrictive tasks and limitations as specified in the ALS, as applicable, depending on engine configuration, within the compliance times (see Note 1 of this AD) as specified in the ALS to comply with paragraph (1) of this AD.

For that AMP, it is acceptable to incorporate the new and/or more restrictive tasks and limitations as specified in the ALS, as applicable, depending on engine configuration, into the AMP to comply with paragraph (3) of this AD.

## **Recording AD Compliance:**

(5) When the AMP of an aeroplane has been revised as required by paragraph (3) or (4) of this AD, as applicable, that action ensures continued accomplishment of the tasks as required by paragraphs (1) and (2) of this AD for that aeroplane. Consequently, after revising the AMP, as required by paragraph (3) or (4) of this AD, as applicable, it is not necessary that accomplishment of individual action is recorded for demonstration of AD compliance on a continued basis.

#### **Ref. Publications:**

GEAC EMM report 0982309 Revision 18 dated 18 December 2020.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.

### **Remarks:**

- 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
- 2. This AD was posted on 29 January 2021 as PAD 21-007 for consultation until 26 February 2021. No comments were received during the consultation period.
- 3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
- 4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the <u>EU aviation safety reporting system</u>. This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.



5. For any question concerning the technical content of the requirements in this AD, please contact: GE Aviation Czech, Beranových 65, 199 02 Praha 9 – Letňany, Czech Republic, Telephone: +420 222 538 999, Website: <a href="https://www.geaviation.cz/customer-support">https://www.geaviation.cz/customer-support</a>, E-mail: <a href="mailto:tp.ops@ge.com">tp.ops@ge.com</a>.

